

ABSTRACTAPPARATUS AND METHOD FOR GENERATING TEXTURE
MAPS FOR USE IN 3D COMPUTER GRAPHICS

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A texture map (188) for texturing a polygon mesh 3D computer model (150) during rendering is generated by defining a respective triangle within the texture map for each triangle in the polygon mesh to create a texture coordinate map (170), and allocating image data to each defined triangle. To generate the texture coordinate map, the triangles in the polygon mesh are processed to generate a plurality of lists, each list identifying adjacent triangles in the mesh having shapes which can be packed into strips (173-179) of the texture coordinate map without significant shape distortion. The triangle lists are then packed into the texture coordinate map strips. No padding is defined between triangles in the same list, only between triangles of different lists. Image data is allocated to each triangle.